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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,678	06/26/2003	Vincent J. Zimmer	42P16421	8063

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EXAMINER

LANIER, BENJAMIN E

ART UNIT	PAPER NUMBER
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2132

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/607,678	Applicant(s) ZIMMER ET AL.	
	Examiner BENJAMIN E. LANIER	Art Unit 2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 15-20,25-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 21-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Species I in the reply filed on 19 February 2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 15-20, 25-30 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 19 February 2008.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
4. Claims 21-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are drawn to a machine-readable media that is defined in the specification as being a propagated signal (Page 23, [0071]). Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in §101 (MPEP 2106).
5. The Supreme Court has read the term "manufacture" in accordance with its dictionary definition to mean "the production of articles for use from raw or prepared materials by giving to

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these materials new forms, qualities, properties, or combinations, whether by hand-labor or by machinery.” Diamond v. Chakrabarty, 447 U.S. 303, 308, 206 USPQ 193, 196-97 (1980) (quoting American Fruit Growers, Inc. v Brogdex Co., 283 U.S. 1, 11, 8 USPQ 131, 133 (1931), which in turn, quotes the Century Dictionary). Other courts have applied similar definitions. See American Disappearing Bed Co. v. Arnaelsteen, 182 F.324, 325 (9th Cir. 1910), cert. denied, 220 U.S. 622 (1911). These definitions require physical substance, which a claimed signal does not have. Congress can be presumed to be aware of an administrative or judicial interpretation of a statute and to adopt that interpretation when it re-enacts a statute without change. Lorillard v. Pons, 434 U.S. 575, 580 (1978). Thus, Congress must be presumed to have been aware of the interpretation of manufacture in American Fruit Growers when it passed the 1952 Patent Act.

6. A manufacture is also defined as the residual class of product. 1 Chisum, §1.02[3] (citing W. Robinson, The Law of Patents for Useful Inventions 270 (1890)). A product is a tangible physical article or object, some form of matter, which a signal is not. That the other two products classes, machine and composition of matter, require physical matter. A signal, a form of energy, does not fall within either of the two definitions of manufacture. Thus, a signal does not fall within one of the four statutory classes of §101.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1, 4, 9, 13, 21, 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Roese, U.S. Publication 2004/0158735. Referring to claims 1, 3, 21, 22, Roese discloses 802.1x network authentication wherein an endpoint device is authenticated for network access to a specified port utilizing firmware functions (Figure 1 & [0015] & [0030]), which meets the limitation of loading port authentication firmware instructions in a supplicant system, and authenticating a network port hosted by an authenticator system to which the supplicant system is linked via execution of the port authentication firmware instructions on the supplicant system, the network port is authenticated during an operating system (OS) runtime phase, the media comprises a firmware storage device.

Referring to claim 9, Roese discloses authentication using EAP over LANs ([0007] & [00028]).

Referring to claim 13, Roese discloses a determination of whether a port is authenticated is made by an authentication server that is linked in communication with the authenticator system (Figure 1, 103).

Referring to claim 14, Roese discloses a callable interface via which a port authentication process can be invoked ([0025]).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 2, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roese, U.S. Publication 2004/0158735, in view of Intelligent Platform Management Interface (IPMI) Specification. Referring to claims 2, 24, Roese does not disclose that the authentication functions performed by the firmware are done so in a pre-boot phase. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the firmware of Roese to perform the authentication functions at the pre-boot phase in order to provide the authentication functions to OS absent endpoint devices as taught by IPMI (Page 15, section 1.6.20).

12. Claims 5-8, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roese, U.S. Publication 2004/0158735, in view of Cotichini, U.S. Patent No. 6,300,863. Referring to claims 5-8, 23, Roese does not disclose that the firmware utilizes hidden execution mode transparent to the operation system. Cotichini discloses a CompuTrace agent that is adapted to work under an SMM environment that is triggered in response to an SMI event (Col. 30, lines 6-22), which meets the limitation of network port authentication is performed by executing the port authentication firmware using a hidden execution mode that is transparent to an operating system running on the supplicant system during the OS-runtime phase, the hidden execution mode is a

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system management mode (SMM), the firmware instructions are embedded as one or more SMM handlers, asserting an SMI on a processor of the supplicant on a periodic basis, dispatching said one or more SMM handlers to handle the SMI via operations, determining if a network port needs to be authentication, and in response, authenticating the network port. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a transparent agent similar to CompuTrace to perform authentication functions in Roese in order to provide independent transactions at regular intervals as taught by Cotichini (Col. 30, lines 6-9).

13. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roese, U.S. Publication 2004/0158735, in view of Buer, U.S. Publication No. 2004/0250126. Referring to claims 10-12, Roese does not specify port authentication using an access/challenge scheme. Buer discloses port authentication using an access/challenge scheme that employs a transport layer security (TLS) challenge response in which authentication is determined based on credentials provided by the supplicant system, the TLS challenge response employs credentials stored in a Trusted Platform Module (TPM), and wherein the method further comprises retrieving the credentials from the TPM ([0022]-[0026]). It would have been obvious to one of ordinary skill in the art at the time the invention was made for the authentication scheme of Roese to utilize the TPM and TLS protocol as described by Buer in order to allow direct communication with the network while circumventing the TCP/IP stack at the client machine as taught by Buer ([0024]-[0025]).

Conclusion

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN E. LANIER whose telephone number is (571)272-3805. The examiner can normally be reached on M-Th 6:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Benjamin E Lanier/
Primary Examiner, Art Unit 2132